



BLUR LT

2008 RELEASE

MESSING WITH SUCCESS



Since its introduction in 2005, the Blur LT has gone on to become our best selling bike. It's a long-legged, lightweight but surprisingly durable workhorse that defies being lumped into any one category, and is at home everywhere from mellow X-C terrain to the steepest and rockiest slices of the back of beyond. Why then, if something is so popular, so tough, and so capable, would we go and scrap it for something new?

Much as we love the old LT, not long after it hit the trails, we began to pick it apart to try and find ways of making it better. Now, after an exhaustive two years of intensive design and prototyping, we're ready to unveil the next generation of Blur LT.

Here are the Cliff Notes to the evolution:

- No other design can be manipulated to allow the degree of change in shock rates that VPP suspension can. With regard to the new LT, the shock rates have actually been mellowed out somewhat, for a more active early suspension feel and a more linear action toward bottom-out.
- Both upper and lower links have been totally redesigned. The alloy lower link has grease ports and intricate labyrinth seals to operate in a clean, quiet, contaminant-free environment. The upper link is now molded from carbon fiber and the shock mount is isolated from the pivot axles. Beefy 15mm diameter pivot axles bolt into the frame on one end, and feature trick collet-heads on the other end to lock them into the frame and eliminate any chance of loosening or slop.
- Completely new frame, designed to offer sweet riding geometry when used with forks ranging from 140mm to 160mm travel. Formed tubing offers a lower standover height and a new rear swingarm is super stiff while offering ample tire clearance.
- Available mid-April, 2008, in the usual array of SCB colors as well as ano black & skidmark
- Prices start at: \$1750 (frame and Fox Float R shock, powdercoat finish)
\$1950 (frame and Fox Float R shock, ano finish)

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FEATURE BREAKDOWN

CARBON FIBER
UPPER LINK



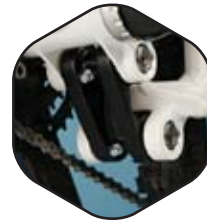
AMPLE
MUD CLEARANCE



MULTIPLE CABLE
ROUTING OPTIONS



REPLACEABLE DERAILER
HANGER/BOTTLE OPENER



GREASE PORTS

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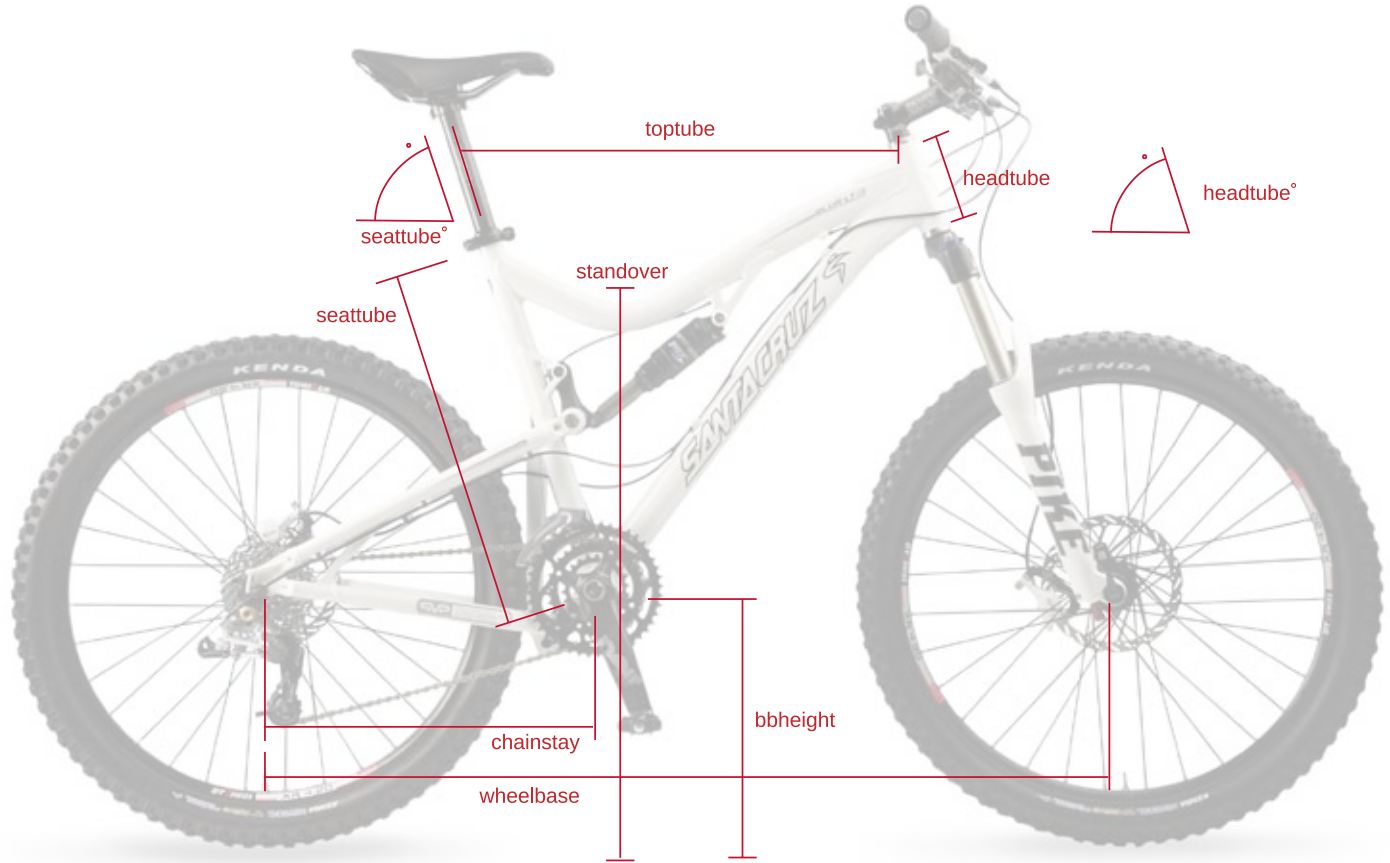


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GEOMETRY

BASED ON 515MM A-C FORK



GEO-CHART

SIZE	TOPTUBE	SEATTUBE	HEADTUBE	HEADTUBE°	SEATTUBE°	BB HEIGHT	WHEELBASE	CHAINSTAY	STANDOVER
small	21.5"	15.7"	3.9"	69.0°	72.5°	13.5"	41.7"	17.0"	27.8"
medium	22.5"	17.0"	4.3"	69.0°	72.5°	13.5"	42.7"	17.0"	28.0"
large	23.5"	19.0"	4.7"	69.0°	72.5°	13.5"	43.8"	17.0"	28.6"
x-large	24.5"	20.5"	5.5"	69.0°	72.5°	13.5"	44.8"	17.0"	29.3"





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COMPARISON CHART

THE OLD BLUR LT

THE NEW BLUR LT



135MM	REAR TRAVEL	140MM
7.875X2.25"	SHOCK	8.5X2.5"
-27/+35%	SHOCK RATE	-15/+18%
24MM	CSL GROWTH	17MM
501MM	FORK A-C	515MM
773MM (M)	STANDOVER	712MM (M)
ALUMINUM, 4 RADIAL CONTACT CARTRIDGE BEARINGS	LOWER LINK	ALUMINUM, 4 ANGULAR CONTACT CARTRIDGE BEARINGS, 4 LIP SEALS, 2 GREASE PORTS
TITANIUM PLATE	UPPER LINK	MOLDED CARBON FIBER
12MM ALUMINUM LOWER AXLES, STEEL BOLTS	LINK HARDWARE	15MM 7075 ALUMINUM AXLES (LOWER), M6 TI BOLTS AND CAPTURED WASHERS
REPLACEABLE DROPOUT	DER HANGER	REPLACEABLE HANGER

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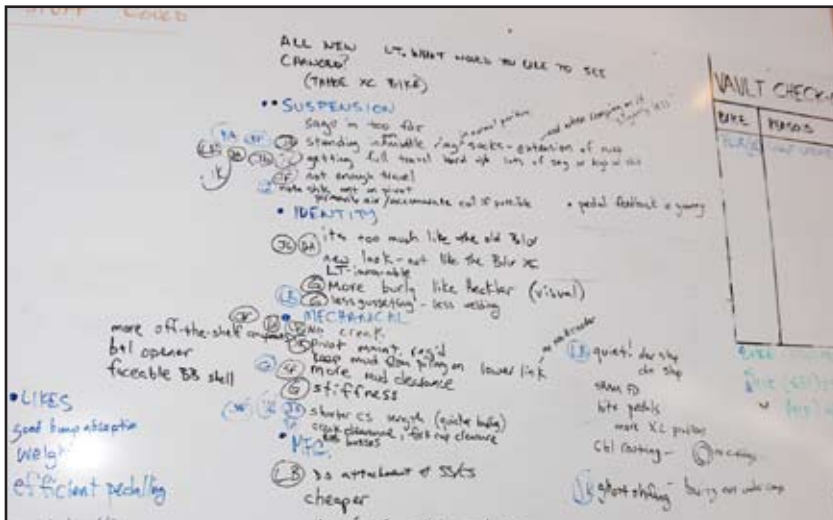


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HOW IT ALL STARTED BY JOE GRANEY

In late 2004, we started work on new suspension systems. A couple people working full-time, a fat budget, and carte blanche to come up with “something that was better” (this was about the same time the Nomad had just come on the market). We came up with some weird shit, and some total crap. There were a lot of whiteboards filled with crazy ideas that were hashed out, often completely discarded. There were a bunch of Frankenstein suspension bikes that were made during this exploratory process of picking through the variables we had. We kept making test rigs to isolate one parameter so we could evaluate the ride on that parameter alone. It’s easy to look back and think we sure were dumb to even go down some of the routes we did. But we took a long time and really proved to ourselves what mattered. A seven pivot single pivot bike is probably not a good idea. I’ll never forget the afternoon we put a titanium spring on the dyno, just in case.



So then, in mid-2006, a big group of us sat down and filled a whiteboard with all the stuff we wanted to change about the Blur LT. It was a no holds barred kind of whiteboard. We’d lived with this bike as riders and mechanics and engineers for a few years at this point. The list we ended up with included everything from how we could eliminate steps in the fabrication facility to how it climbed in the granny. It was a big list, so everyone got to pick their top three points and put their initials next to it. And then we started putting together what some people had learned in the last year’s suspension experimentations with everything the other guys learned from the design, testing and quality work that went into the new line of single pivot bikes.





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MULE VARIATIONS

FIRST MULE

The first suspension mule was the BLT2B. Well, we did build the BLT2A. But it sucked so we're not counting it. I always said that it was about finding the outer limit, so we could come back toward what we knew.

Most people think I'm making that up, but we did find the limit. Gary loves making mules that have a special touch, a unique approach to each. This one was no exception.

The BLT2B was a great riding bike. 145mm travel, plush, incredible pedaling behavior. It was almost too good in the squish department though, maybe too close to Nomad territory, and too far from XC. I loved that mule.

SECOND MULE

BLT2C shortened travel up to 135mm. The shock rate curve got a little tighter, which makes for livelier but less plush feel, and we went for a teeny bit more anti-squat under big ring power. (While seated, really bearing down in the big ring it squatted less than the BLT2B). The bravery and fearlessness that the 2B brought into play were not in the 2C though. Solid bike, but not really a BLT.

THIRD MULE

BLT2D (Tootie) split the difference between 2B and 2C, with more travel preferred, so this one's at 140mm. The shock rate came back to a plusher setting, figuring that's a nice compromise on the 2B - 5mm less travel, but in the plush zone. We kept the little bit of anti-squat (most people couldn't tell anyway). Tootie was Heyliger's first solo attempt at building a mule. God it's ugly. Rode great though.

FOURTH MULE

And finally - the BLT2E, aka Carbonello

Was the 2D really that good? Jesus, let's make sure. Move that seat tube pivot back so the little doohickey you gotta weld on there is small and light while we're at it. Yeah, that's the one. This mule was ridden more than any mule we've ever made.



BLT2A



BLT2B



BLT2C



BLT2D



BLT2E - AKA CARBONELLO

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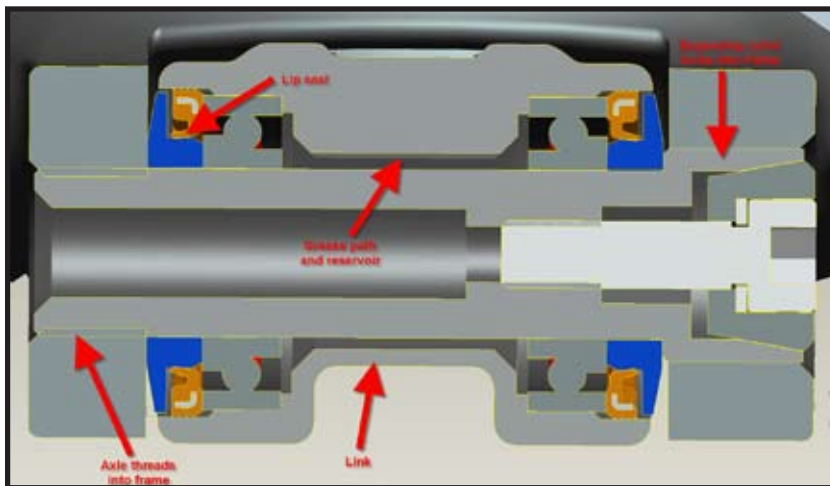


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SWEATING THE DETAILS

During the weeks and months in the shop while Gary and Heyliger were fabricating each mule from spare parts and each with some different methodology, we also started thinking about pivots, and trying to make a bike that was better for everyone, from the welders and straighteners, QC inspectors and production engineers, painters and frame assemblers, mechanics and riders. Pivots were first. Just about everyone had a beef with those.



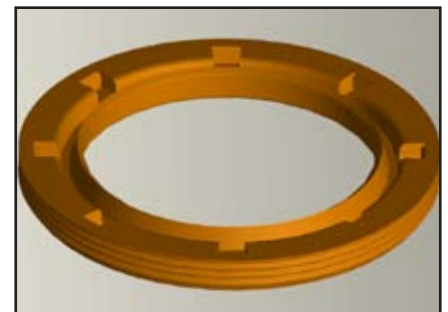
A TIGHTER FIT, LESS FLEX AND NO CREAKING

Angular contact bearings are housed within the lower link. A collet axle threads into one side, and is snugged to take all the pre-load out of the bearings (one of the things that can makes suspension bikes flexier is radial clearance on installed bearings). (6 7902 bearings, 2 7900 bearings per frame)

The tapered washer is threaded into the collet axle, expanding it into the bore on the frame. This ceases relative motion between both sides of the axle - which keeps the low axial force that keeps bearing taut - constant, while also eradicating relative motion between parts (the source of creaks) with a mechanical lock. (4 collet axles, 4 tapered washers, 4 ti bolts and ti washers \per frame)

SEALING THE DEAL

Then there are some seals we tooled up that are pretty sweet. We wanted a full contact seal – but one that would allow a grease purge - and labyrinth sealing keeping the bearings pushed out, while accommodating the clearance requirements for mud and our collet axles (BLT.2 has more clearance for mud). Anyway, if anyone's got a sweeter seal, I'll kiss that shit. (8 molded rubber seals, 8 aluminum seal caps per frame)



INSERT MOLDED SEAL

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SWEATING THE DETAILS (CONTINUED)

OH YEAH, AND WE'RE GOING TO GIVE YOU A GREASE GUN

Something we learned after a lot of research which now seems obvious: Grease doesn't stay in bearings no matter what you do. The balls roll, clearing the path. The grease leaks out of the bearing seals, and there's airspace between the balls. Now, just humidity in the air (which is in the bearing) is enough to cause corrosion – even if the bike just sits. That ends up decreasing the smooth life of bearings. So we went the automotive way. Put a grease gun (a real grease gun) on the lower link fittings every year or so, pump until the grease exiting appears clean, ride bike. Done. The grease lubricates and provide a small internal reservoir, and together with the seal keeps moist air from entering. Even if you neglect your bike you are covered. (2 ball-check grease ports on lower link).

DISASSEMBLE AND REASSEMBLE WITH A MULTI-TOOL

The two bottom pivots come out from the left side, so you can remove the lower link without removing the crank set. The upper link axles come out on the right, and put back the stiffness of removing the seat stay brace (necessary to have a "real" straight seat tube). The upper link is molded w/ medium length carbon fiber with a mix of unidirectional and isotropic properties in this really tricky mold(see image below right). The frame can be disassembled and reassembled with a decent multi-tool. It's got cable routing for adjustable height seat posts (you'll love it)

It's the bike we all wanted, and we did it right.



UPPER LINK



LOWER LINK WITH GREASE GUN PORT



MOLD FOR THE UPPER LINK

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